

Immediate Postpartum Provision of Highly Effective Reversible Contraception

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36 Unplanned pregnancies are associated with a higher risk of adverse maternal and
37 neonatal outcomes, particularly when they occur within a short time interval from a
38 previous birth.¹ Early access to highly effective reversible contraception (implants and
39 intrauterine contraceptives (IUCs), including both copper intrauterine devices and
40 levonorgestrel-releasing intrauterine systems) in the postpartum period has been
41 demonstrated to help women prevent unplanned and rapid-repeat pregnancies.² We
42 discuss several compelling reasons for immediate postpartum provision of such methods
43 to women who desire them.

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45 IUCs and implants are in the highest tier of contraceptive effectiveness³ because they
46 require no active adherence on the part of the user. Provision of these methods in
47 hospital following delivery is particularly attractive because it is convenient for women
48 who may be particularly motivated to prevent another pregnancy and logistically optimal
49 in that health professionals trained in method placement could be readily available.
50 Despite previous concerns, immediate postpartum placement of IUCs and implants is
51 also extremely safe.⁴ There is no increased risk of pain, bleeding, infection or uterine
52 perforation for IUCs placed immediately (within ten minutes of placental delivery)
53 compared to delayed placement (weeks later). Reported expulsion rates vary widely,
54 partly due to differences in follow-up intervals and quality of evidence across studies. For
55 copper-releasing IUCs, immediate postpartum placement is consistently associated with
56 higher expulsion rates than for delayed placement (1-36.9% *versus* ~3.0%)⁵ and the
57 expulsion rate following immediate placement after Caesarean delivery is consistently
58 lower than that following immediate placement after vaginal delivery (0-13.9% *versus* 7.5-
59 22.6%).⁵ However, these risks seem tolerable given the alternative of no early
60 contraception cover at all. Up to 41% of women will attempt vaginal intercourse within
61 six weeks of delivery,⁸ and among women who are not exclusively breastfeeding,

ovulation may already have returned by that time or will return soon thereafter.⁹ Offering IUCs and implants to all women prior to hospital discharge (or at home, in the case of home births) would circumvent this problem.¹⁰

The safety of post-delivery placement of IUCs and implants is reflected in the most recently updated *Medical Eligibility Criteria for Contraceptive Use*, which provides evidence-based guidance regarding medical eligibility for specific contraceptive methods. These guidelines are used by specialists in sexual and reproductive health worldwide to balance the risks and benefits of contraceptive methods for individual women. The 2009 World Health Organization *Medical Eligibility Criteria (WHO MEC)* supports immediate postpartum placement of levonorgestrel-releasing implants and IUCs for non-breastfeeding women and copper IUCs for all women. Some country-specific MECs differ regarding the evidence on levonorgestrel and breastfeeding. The 2009 *UK MEC* and the 2010 *US MEC* both support immediate postpartum placement of implants for all women and the *US MEC* also extends this guidance to levonorgestrel-releasing IUCs.

Women who choose immediate postpartum IUCs and implants have a high level of method satisfaction: US studies have shown high levels of continuation at six and 12 months postpartum (84.3-87.6% and 76.3% respectively for IUCs, and 96.9% and 86.3% for implants).³ Moreover, for immediate postpartum implant placement, a reduction in the likelihood of repeat pregnancy within 12 months has also been demonstrated (2.6% *versus* 18.6% among women using other methods).³ For immediate IUC placement, a decision-analysis model based upon data from the US estimated that 88 unintended pregnancies per 1,000 women would be prevented over two years.⁶

In addition to improving women's health by preventing unplanned pregnancies,

immediate postpartum provision of IUCs and implants would also save money. The decision-analysis model of immediate postpartum IUC placement mentioned above found cost-savings of US\$282,540 per 1,000 women who desired a postpartum IUC.⁶ A US cost-effectiveness analysis of implants placed prior to hospital discharge following delivery found cost-savings of US\$550,000, US\$2.5 million, and US\$4.5 million per 1,000 women at 12, 24 and 36 months postpartum respectively.⁷

Implementation of post-delivery IUC and implant services in many countries would not be without challenges. An initial monetary out-lay would be needed to train the relevant healthcare professionals in contraceptive counseling and device-fitting. Significant investments would be required in terms of time, equipment and devices. Yet in the longer-term, these costs would likely be more than offset by a drop in the medical and social care cost of unintended pregnancies. In addition, reducing the need for contraceptive provision appointments in the later postpartum period would lead to time and cost savings to both women and healthcare systems.

In light of the Parliamentary Assembly Council of Europe (PACE) resolution on reducing unintended pregnancy among EU member states¹¹ and the Millennium Development goal of reducing the worldwide maternal mortality ratio by three-quarters by 2015,¹² widespread adoption of postpartum provision of IUCs and implants represents an important step towards improving global women's reproductive health.

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